

**Amendments to the Claims:**

1. (Currently Amended) A method of modifying a ~~substrate material~~ milk by means of a bacterial culture which is capable of being metabolically active in said ~~substrate~~ milk, ~~whereby the bacterial culture is not susceptible to attack by bacteriophages~~, the method comprising

- (i) isolating a bacterial strain which is not capable of DNA replication, RNA transcription or protein synthesis in said ~~substrate material~~ milk but is capable of metabolically modifying the ~~substrate material~~ milk,
- (ii) propagating the isolated bacterial strain in a medium wherein the strain is capable of replicating to obtain the bacterial starter culture of said strain,
- (iii) adding the thus obtained bacterial culture to the ~~substrate material~~ milk and keeping the ~~substrate material~~ milk under conditions where the bacterial culture is metabolically active,

whereby, if the ~~substrate material~~ milk is contaminated with a bacteriophage, the metabolic activity of the bacterial culture is substantially unaffected by the bacteriophage.

2. (Currently Amended) A method according to claim 1 wherein the ~~substrate material~~ milk is limited with respect to at least one compound that is required by the bacterial strain for DNA replication, RNA transcription or protein synthesis.

3. (Currently Amended) A method according to claim 2 wherein the bacterial strain is a mutant strain ~~being which is~~ auxothrophic in respect of a compound which is not present in the ~~substrate material~~ milk and which is required by the strain for replication.

4. (Previously Amended) A method according to claim 3 wherein the mutant strain is a Pur mutant.

5. (Previously Amended) A method according to claim 3 wherein the mutant strain is a *thyA* mutant.

6. (Currently Amended) A method according to claim 2 wherein the strain in said ~~substrate material~~ milk is not capable of performing at least one activity selected from the group consisting of DNA replication, RNA transcription and protein synthesis.

7. (Currently Amended) A method according to claim 1 wherein the ~~substrate material~~ milk comprises at least one compound that inhibits the DNA replication, RNA transcription or the protein synthesis of the bacterial strain.
8. (Cancelled)
9. (Currently Amended) A method according to claim 1 wherein the bacterial culture is selected from the group consisting of *Lactococcus* spp., *Lactobacillus* spp., *Leuconostoc* spp., *Pediococcus* spp., *Streptococcus* spp., *Propionibacterium* spp., *Bifidobacterium* spp., *Staphylococcus* spp., *Micrococcus* spp., *Bacillus* spp., *Enterobacteriaceae* spp. including *E. coli*, *Actinomyces* spp., *Corynebacterium* spp. and *Brevibacterium* spp.
10. (Previously Amended) A method according to claim 9 wherein the bacterial culture is a culture of *Lactococcus lactis*.
11. (Currently Amended) A method according to claim 1 wherein the bacterial culture added to the ~~substrate material~~ milk includes the bacterial strain at a concentration in the range of  $10^5$  to  $10^9$  CFU/ml or g of the material.
12. (Previously Amended) A method according to claim 1 where the bacterial culture comprises a genetically modified strain which, relative to its parent strain is enhanced in at least one metabolic pathway.
13. (Original) A method according to claim 12 wherein the genetically modified strain has, relative to its parent strain, an enhanced metabolic activity selected from the group consisting of enhanced glycolytic flux and enhanced flux through the pentose phosphate pathway.
14. (Original) A method according to claim 13 wherein the genetically modified strain has, relative to its parent strain, an enhanced ATPase activity.
15. (Original) A method according to claim 1 wherein the bacterial culture comprises a strain which is a conditional mutant which at a predetermined condition does not perform at least one activity selected from the group consisting of DNA replication, RNA transcription and protein synthesis.
16. (Original) A method according to claim 15 wherein the predetermined condition is selected from the group consisting of pH, temperature, composition of the substrate material and presence/absence of an inducer substance.

17. (Previously Amended) A method according to claim 1 wherein the bacterial culture comprises a bacterial strain which is capable of increasing the size of the cells without mitosis.

Claims 18-23 (Cancelled)

24. (Currently Amended) A method of manufacturing a ~~food or feed~~ milk product comprising adding a starter culture composition ~~according to claim 21~~ comprising a modified lactic acid bacterium to a food or feed product starting material a milk product to a milk product and keeping the thus inoculated ~~starting material~~ milk under conditions where the modified lactic acid bacterium is metabolically active, said modified lactic acid bacterium is modified to become incapable of performing DNA replication, RNA transcription or protein synthesis in milk which is limited with respect to at least one compound that is required by the modified lactic acid bacterium for DNA replication, RNA transcription or protein synthesis, said modified lactic acid bacterium is capable of being metabolically active in said substrate material, subject to the limitation, that the modified lactic acid bacterium does not include a strain selected from the group consisting of strain DN101, DN102, DN103, DN104 and DN105 (DSM12289) whereby, if the milk is contaminated with a bacteriophage, the metabolic activity of the modified lactic acid bacterium is substantially unaffected by the bacteriophage.

Claim 25 (Cancelled).

26. (Currently Amended) A method of preparing a ~~food and/or a feed~~ milk product, comprising adding a bacterial starter culture to a ~~food and/or a feed~~ milk product ~~starting material~~, said bacterial starter culture being capable of being metabolically active in said ~~food and/or a feed~~ milk product ~~starting material~~, the bacterial starter culture not being susceptible to ~~attack by bacteriophages~~, the bacterial starter culture made by a method comprising

\_\_\_\_\_ (i) isolating a bacterial strain which is not capable of DNA replication, RNA transcription or protein synthesis in said ~~food and/or a feed~~ milk product ~~starting material~~ but is capable of metabolically modifying the ~~food and/or a feed~~ milk product ~~starting material~~,

\_\_\_\_\_ (ii) propagating the isolated bacterial strain in a medium wherein the strain is capable of replicating to obtain the bacterial starter culture of said strain, and

\_\_\_\_\_ (iii) adding the bacterial starter culture to the ~~food and/or a feed~~ milk product ~~starting material~~ and maintaining the thus-obtained inoculated ~~food and/or a feed~~ milk product ~~starting material~~

~~material~~ under such conditions that the bacterial strain of the bacterial starter culture is metabolically active,

whereby, if the ~~food and/or a feed~~ milk product ~~starting material~~ is contaminated with a bacteriophage, the metabolic activity of the bacterial starter culture is substantially unaffected by the bacteriophage.

27. (Currently Amended) A method of preventing a lactic acid bacterial starter culture infection by bacteriophages in the manufacturing of a ~~food and/or feed~~ milk product, the method comprising adding to the ~~food and/or feed~~ milk product a starter culture comprising a lactic acid bacterium prepared by a method comprising:

(i) isolating a lactic acid bacterium strain which is not capable of DNA replication, RNA transcription or protein synthesis in said ~~food and/or feed~~ milk product but is capable of metabolically modifying the ~~food and/or feed~~ milk product,

(ii) propagating the lactic acid bacterium strain in a medium wherein the lactic acid bacterium strain is capable of replicating to obtain the starter culture of said lactic acid bacterium strain,

(iii) adding the thus obtained starter culture to the ~~food and/or feed~~ milk product which is limited with respect to at least one compound that is required by the lactic acid bacterium strain for DNA replication, RNA transcription or protein synthesis ~~to a food and/or feed~~ milk product ~~starting material~~ and keeping the ~~food and/or feed~~ milk product under conditions where the starter culture is metabolically active,

whereby, if the ~~food~~ milk is contaminated with a bacteriophage, the metabolic activity of the starter culture is substantially unaffected by the bacteriophage.

28. (Previously Added) A method according to claim 4 wherein the mutant strain is *Lactococcus lactis* strain DN105 deposited under the accession number DSM 12289.

29. (Previously Added) A method according to claim 5 wherein the mutant strain is *Lactococcus lactis* strain MBP71 deposited under the accession number DSN12891.

30. (Currently Amended) A method for reducing susceptibility to attack by bacteriophages in ~~a substrate material~~ milk comprising:

(i) isolating an auxotrophic bacterial strain which maintains its metabolic activity in the absence of an auxotrophic component in the ~~a-substrate material~~ milk;

(ii) adding the auxotrophic bacterial strain to said ~~a-substrate material~~ milk.

31. (Currently Amended) A method of preparing a dairy flavouring and/or a product for cheese flavouring comprising, adding a bacterial starter culture to a dairy flavouring and/or a product for cheese flavouring starting material, said bacterial starter culture being capable of being metabolically active in said dairy flavouring and/or product for cheese flavouring starting material, ~~the bacterial starter culture not being susceptible to attack by bacteriophages~~, the bacterial starter culture made by a method comprising:

(i) isolating a bacterial strain which is not capable of DNA replication, RNA transcription or protein synthesis in said dairy flavouring and/or product for cheese flavouring starting material but is capable of metabolically modifying the dairy flavouring and/or product for cheese flavouring starting material,

(ii) propagating the isolated bacterial strain in a medium wherein the isolated bacterial strain is capable of replicating to obtain the bacterial starter culture of said isolated bacterial strain, and

(iii) adding the bacterial culture to the dairy flavouring and/or product for cheese flavouring starting material and maintaining the thus-obtained inoculated dairy flavouring and/or product for cheese flavouring starting material under such conditions that the bacterial strain of the bacterial starter culture is metabolically active,

whereby, if the dairy flavouring and/or product for cheese flavouring starting material is contaminated with a bacteriophage, the metabolic activity of the bacterial starter culture is substantially unaffected by the bacteriophage.

32. (Previously Added) A method according to claim 9 wherein the bacterial culture is E. coli.

#### **REMARKS**

Please amend claims 1-3, 6, 7, 11, 24, 26, 27, 30 and 31. No new matter is added as a result of these amendments. Support for the amendments may be found for instance on page 4, lines 25-26, claim 8 and throughout the application as originally filed. Please cancel claims 8, 18-23 and 25 without prejudice or disclaimer to the subject matter therein. Applicants have amended the claims in a manner which they believe address the Examiner's concerns and which